

Claims

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. In combination with a stairway, an elevator operable between a lower floor and an upper floor, said elevator comprising:

an elevator mechanism having a base, a lift cylinder, a telescoping member, a lift frame secured to said telescoping member, a platform, and a power unit, said lift cylinder having a first end secured to said base and a second end secured to said telescoping member, said second end extendable between a retracted position and an extended position;

said lift cylinder coupled to said power unit,

said telescoping member slidably secured to said base and movable between a nested and extended position,

a controller coupled to said power unit, said power unit responsive to control signals from said controller to selectively actuate said lift cylinder to move said second end of the lift cylinder between said retracted and extended positions, whereby to move said telescoping member between said nested and extended positions to raise and lower said platform,

a movable stairway pivotable between a closed position and an open position, and

a link arm having a first end coupled to said telescoping member and a second end coupled to said movable stairway, whereby said link arm pivots said movable stairway from said closed position when said telescoping member is in said nested position to said opened position when said telescoping member is in said extended position.

2. The combination as claimed in claim 1 wherein said lift cylinder is hydraulically actuated.
3. The combination as claimed in claim 1 wherein said lift cylinder is a jack screw.
4. The combination as claimed in claim 1 wherein said telescoping member extends to a plurality of upper floors.
5. The combination as claimed in claim 1 further comprising an enclosed car secured to said platform.

6. In combination with a stairway, an elevator operable between a lower floor and an upper floor, said elevator comprising:

a lift mechanism secured to said lower floor and extendable between a first position and a second position,

a platform secured to said lift mechanism,

a controller coupled to said lift mechanism,

a stairway pivotable between a closed position and an open position,

said lift mechanism responsive to control signals from said controller to selectively

actuate said lift mechanism to move between said first and second position, and

a pivot mechanism coupled to said stairway and responsive to movement of said lift

mechanism between said first and second positions, whereby said pivot

mechanism pivots said stairway from said closed position when said lift

mechanism is in said first position to said open position when said lift mechanism

is in said second position.

7. The combination as claimed in claim 6 wherein said lift mechanism includes a telescoping member slidably secured to said lift mechanism and movable between a nested position and an extended position.

8. The combination as claimed in claim 7 wherein said telescoping member is hydraulically actuated.

9. The combination as claimed in claim 7 wherein said telescoping member is electrically actuated.

10. The combination as claimed in claim 6 wherein said lift mechanism includes a hydraulically actuated jack screw.

11. The combination as claimed in claim 6 wherein said lift mechanism includes an electrically actuated jack screw.

12. The combination as claimed in claim 6 wherein said lift mechanism includes a scissor lift.

13. The combination as claimed in claim 6 wherein said pivot mechanism includes a link arm having a first end coupled to said lift mechanism and a second end coupled to said movable stairway whereby said link arm pivots said stairway from said closed position when said lift mechanism is in a first position to said open position when said lift mechanism is in said second position.

14. The combination as claimed in claim 6 wherein said stairway includes a hinge secured to a support structure wherein said stairway pivots about said hinge.

15. The combination as claimed in claim 14 wherein said hinge is hydraulically actuated in response to control signals to pivot said stairway from said closed position when said lift mechanism is in said first position to said open position when said lift mechanism is in said second position.

16. The combination as claimed in claim 14 wherein said stairway includes a pivot mechanism responsive to said control signals to pivot said stairway from said closed position to said open position when said lift mechanism moves from said first position to said second position.

17. The combination as claimed in claim 6 wherein said lift mechanism extends to a plurality of upper floors.

18. The combination as claimed in claim 6 further comprising an enclosed car secured to said lift mechanism.